



SCHOOL OF APPLIED TECHNICAL SCIENCES

INDUSTRY LINKS CAPABILITIES AND COMPETENCIES

Planning

- Warehousing operations and design planning
- Transportation planning
- Workforce scheduling in service industry (e.g. healthcare)
- Resources allocation/utilization planning
- Forecasting

Operations Management

- Supply Chain Management (SCM), and Supply Chain Excellence, CSCP
- Enterprise Resource Planning (ERP), and Enterprise Applications Integration (EAI)
- Operations Optimization
- Production Planning and Analysis, CAPM
- Warehouse Management Systems (WMS)
- Strategic Management
- Lean Manufacturing
- Operations scheduling
- Inventory management
- Spare parts management
- Joint production maintenance policies
- Fleet management

Quality Management

- Six Sigma
- Statistical process control (CQE-ASQ: certified quality engineer)
- Service Quality Management
- Customer Relationship Management (CRM)
- Business process reengineering
- Quality Management Systems (QMS) development
- QMS auditing and performance measurement
- Quality assurance applications and good manufacturing practices (GMP) in pharmaceutical industry.
- Applied statistics applications
- Statistical Dynamic Data Analysis
- Maintenance Management

Manufacturing Processes, Materials Processing and Characterizations

- Materials composites optimization
- Materials properties (Mechanical/thermal/physical/electrical) testing
- Finite element modeling and analysis (mechanical engineering design of components and manufacturing processes, e.g. including metal forming)
- Non-Destructive
- Corrosion Testing
- Microfabrication and Nanofabrication Technologies
- Materials processing (thermal, surface, etc.)
- Additive Manufacturing Technologies
- Micro and Nano Fabrication
- Optical microscopy and scanning electron microscopy (microstructural analysis)
- Chemical analysis of components (EDX, XRD, XPS)

Ergonomics and Human factors

- Ergonomic Workspace Assessment
- Environmental Ergonomics
- Driver and Vehicle Ergonomics
- Occupational Health and Safety

Energy Efficiency & Management

- Energy efficiency in buildings and industry.
- Heavy industries energy management.
- Photovoltaic Systems.
- HVAC
- Thermal hybrid systems
- ISO50001.
- CEM & CMVP.
- Green buildings

Structural Mechanics

- Vibration diagnosing and controlling.
- Structural health monitoring
- Troubleshooting of mechanical systems.

Simulation in Engineering

- Production Systems Simulation
- Discrete Event Simulation
- Computational fluid dynamics (CFD)

Control and Automation

- Process control systems (Distributed Control Systems -DCS and Supervisory Control and Data Acquisition Systems -SCADA)
- Industrial Instrumentation Systems
- Industrial Automation and Programmable
- Logic Controllers (PLCs)
- Passive vibration control
- Active vibration control
- Machine automation

CONTACT INFO

School of Applied Technical Sciences
German Jordanian University
P.O.Box 35247
11180 Amman – Jordan

Dr. Anas M. Atieh
Assistant Professor / Industrial Engineering
Department
anas.atieh@gju.edu.jo
+962 6 429 4527